

AMENDMENTS TO THE CLAIMS

Please amend claims 4, 5, 9, 10, 14, 15, 18, 19 and 20 as follows:

1. (Original) A hearing aid forming a Noise-Vocoded Speech Sound signal that is obtained by dividing at least one portion of an input sound signal into a frequency band signal and subjecting one of the frequency band signals to noise, and outputting the Noise-Vocoded Speech Sound -signal.
2. (Original) A hearing aid forming a Noise-Vocoded Speech Sound signal that is obtained by dividing at least one portion of an input sound signal into a plurality of frequency band signals and subjecting the frequency band signals to noise, and outputting the Noise-Vocoded Speech Sound signals.
3. (Original) The hearing aid according to claim 1 or 2, wherein
a Noise-Vocoded Speech Sound signal in which a component of a
-sound source signal is subjected to noise is generated by:
 - extracting a signal with a predetermined frequency band
from the sound source signal by a first band filtering portion
having a plurality of band filters;
 - extracting an amplitude envelope of each frequency band
signal by an envelope extracting portion having an envelope
extractor;
 - applying a noise source signal to a second filtering portion
having a plurality of band filters to extract a noise signal
corresponding to the predetermined frequency band;
 - multiplying an output from the first band filtering portion
by an output from the second band filtering portion in a multiplying
portion; and
 - accumulating outputs from the multiplying porton in an adding portion.

4. (Currently amended) The hearing aid according to claim 1 or 2 ~~any one of claims 1 to 3~~, wherein at least one of a number of the band filters for division into frequency band signals and a frequency of a frequency band boundary can be changed at least through language.

5. (Currently amended) The hearing aid according to claim 1 or 2 ~~any one of claims 1 to 3~~, wherein at least one of a number of the band filters for division into frequency band signals and a frequency of a frequency band boundary can be changed through automatic language recognition.

6. (Original) A training device outputting a Noise-Vocoded Speech Sound signal that is obtained by dividing at least one portion of an input sound signal into a frequency band signal and subjecting one of the frequency band signals to noise, receiving a response from a trainee and outputting a result as to whether the response is correct or incorrect.

7. (Original) A training device outputting a Noise-Vocoded Speech Sound signal that is obtained by dividing at least one portion of a sound signal into a plurality of frequency band signals and subjecting the frequency band signals to noise, receiving a response from a trainee and outputting a result as to whether the response is correct or incorrect.

8. (Original) The training device according to claim 6 or 7, wherein a Noise-Vocoded Speech Sound signal in which a component of a sound source signal is subjected to noise is generated by:

extracting a signal with a predetermined frequency band from the sound source signal by a first band filtering portion having a plurality of band filters;
extracting an amplitude envelope of each frequency band signal by an envelope extracting portion having an envelope

extractor;

applying a noise source signal to a second filtering portion having a plurality of band filters to extract a noise signal corresponding to the predetermined frequency band;

multiplying an output from the first band filtering portion by an output from the second band filtering portion in a multiplying portion; and

accumulating outputs from the multiplying portion in an adding portion.

9. (Currently amended) The training device according to claim 6 or 7 ~~any one of claims 6 to 8~~, wherein at least one of a number of the band filters for division into frequency band signals and a frequency of a frequency band boundary can be changed at least through language.

10. (Currently amended) The training device according to claim 6 or 7 ~~any one of claims 6 to 8~~, wherein at least one of a number of the band filters for division into frequency band signals and a frequency of a frequency band boundary can be changed through automatic language recognition.

11. (Original) A game device outputting a Noise-Vocoded Speech Sound signal that is obtained by dividing at least one portion of a sound signal into a frequency band signal and subjecting one of the frequency band signals to noise, receiving a response from a game player and outputting a result as to whether the response is correct or incorrect.

12. (Original) A game device outputting a Noise-Vocoded. Speech Sound signal that is obtained by dividing at least one portion of a sound signal into a plurality of frequency band signals and subjecting the frequency band signals to noise, receiving a response from a game player and outputting a result as to whether the response is

correct or incorrect.

13. (Original) The game device according to claim 11 or 12, wherein
a Noise-Vocoded Speech Sound signal in which a component of a
sound source signal is subjected to noise is generated by:

extracting a signal with a predetermined frequency band
from the sound source signal by a first band filtering portion
having a plurality of band filters;

extracting an amplitude envelope of each frequency band
signal by an envelope extracting portion having an envelope
extractor;

applying a noise source signal to a second filtering portion
having a plurality of band filters to extract a noise signal
corresponding to the predetermined frequency band;

multiplying an output from the first band filtering portion
by an output from the second band filtering portion in a multiplying
portion; and

accumulating outputs from the multiplying portion in an
adding portion.

14. (Currently amended) The game device according to claim 11 or 12 ~~any one of claims 11 to 13~~, wherein

at least one of a number of the band filters for division into

frequency band signals and a frequency of a frequency band boundary
can be changed at least through language.

15. (Currently amended) The game device according to claim 11 or 12 ~~any one of claims 11 to 13~~, wherein

at least one of a number of the band filters for, division into

frequency band signals and a frequency of a frequency band boundary
can be changed through automatic language recognition,

16. (Original) A sound output device, wherein
a Noise-Vocoded Speech Sound signal in which a component of a
sound source signal is subjected to noise is generated by:
extracting a signal with a predetermined frequency band
from the sound source signal by a first band filtering portion
having a plurality of band filters;
extracting an amplitude envelope of each frequency band
signal by an envelope extracting portion having an envelope
extractor;
applying a noise source signal to a second filtering portion
having a plurality of band filters to extract a noise signal
corresponding to the predetermined frequency band;
multiplying an output from the first band filtering portion
by an output from the second band filtering portion in a multiplying
portion; and
accumulating outputs from the multiplying portion in an
adding portion, and
wherein at least one of a number of the band filters for division
into frequency band signals and a frequency of a frequency band
boundary can be changed at least through language.

17. (Original) The sound output device according to claim 16, wherein at least one of a number
of the band filters for division into frequency band signals and a frequency of
a frequency band boundary can be changed through automatic language
recognition.

18. (Currently amended) The hearing aid according to claim 1 or 2 ~~any one of claims 1 to 5~~,
comprising a sound signal
extractor for extracting only a sound component from an input signal, wherein said at
least one portion of an input sound signal is a signal of the sound component
extracted by the sound signal extractor.

19. (Currently amended) The training device according to claim 6 or 7 ~~any one of claims 6 to 10~~, comprising a sound signal extractor for extracting only a sound component from a signal, wherein said at least one portion of a sound signal is a signal of the sound component extracted by the sound signal extractor.

20. (Currently amended) The game device according to claim 11 or 12 ~~any one of claims 11 to 15~~, comprising a sound signal extractor for extracting only a sound component from a signal, wherein said at least one portion of a sound signal is a signal of the sound component extracted by the sound signal extractor.

21. (Original) The sound output device according to claim 16 or 17, comprising a sound signal extractor for extracting only a sound component from a sound signal, wherein the sound source signal from which the first band filtering portion extracts is a signal of the sound component extracted by the sound signal extractor,